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EXAMINER

MOORE JR, MICHAEL J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|---------------------------------------|--|
| Office Action Summary | Application No. 09/323,135 | Applicant(s) LAROQUE ET AL. | |
| | Examiner MICHAEL J. MOORE JR | Art Unit 2619 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the distinction between the coupler 1 and the telephone exchange as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specifically, it is unclear from Figure 1 what the distinction is between the coupler 1 and the telephone exchange (PABX, circuit switch). In the last paragraph on page 4

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of the specification, it is disclosed that the signaling coupler 1 of Figure 1 is designed to be placed in a telephone exchange. In Figure 1, there is a labeling "1" that points to the inside of the box labeled PABX. From this labeling, it is unclear what the coupler 1 comprises (interpreter 14, interfaces 2 and 5, or a subset of these elements). Further, in the current claim language, a "circuit switch" is claimed that comprises "a coupler", "an interpreter", and "a receiver". This would imply that the coupler and the interpreter are two separate entities. Further clarification of the coupler 1 of Figure 1 is suggested.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification currently does not provide proper antecedent basis for the claimed "tangible computer readable medium" of claims **17-21**.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims **17-21** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Specifically, Applicant has failed to provide antecedent basis for the claim terminology "computer readable medium" in the specification. Therefore, in this instance, it is reasonable to interpret "computer readable medium" as fairly conveying signals and other forms of propagation or transmission media to one of ordinary skill in

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the art. Therefore, these claims are held non-statutory as failing to be limited to embodiments which fall within a statutory category.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims **17-21** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claims **17-21** are now directed to “a tangible computer readable medium storing instructions”. Examiner was unable to find adequate support in the originally filed specification for “a tangible computer readable medium storing instructions”. Therefore these claims constitute new matter.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims **3-6, 14, and 18** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On lines 3-4, there is some confusion regarding the underlined limitations in view of Applicant's Figure 2.

Specifically, upon Applicant's current amendment to these claims, there is now confusion as to the order of the claimed steps in comparison to the disclosure of Figure 2.

Referring to *amended* claim **3**, the step "receiving the signaling message in a receiving exchange of the switch and adding a receive flag to the signaling message" appears to correspond to step 25 of Figure 2.

The subsequent steps of "adding", "interpreting", and "outputting" appear to correspond to steps 22, 23, and 24, respectively, of Figure 2.

It is unclear how the step 25 occurs before steps 22, 23, and 24 as claimed. This appears to contradict the disclosure and Figure 2.

Further, the order of these steps now contradict the limitation "wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch". If the steps were performed in the claimed order, the receive flag would be transmitted in the "outputting" step, which contradicts the limitation that the receive flag is internal and not transmitted.

A suggestion to obviate this rejection would be to place the "receiving" step after the "outputting" step in claims **3 and 18** in order to correspond to the disclosure and Figure 2.

Claim Rejections - 35 USC § 103

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8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims **1-23 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. (U.S. 6,324,280) (hereinafter "Dunn") in view of Park (U.S. 5,675,634).

Regarding claim **1**, *Dunn* teaches the originating switch 1 (circuit switch) of Figure 1.

Dunn also teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or

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the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn does not teach “wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch”.

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim **2**, *Dunn* further teaches terminating toll switch 2 that receives an initial address message (IAM) 40 indicating the IP address of the originating switch 1 as spoken of on column 3, lines 39-45.

Dunn further teaches terminating toll switch 2 that in response to receipt (processing) of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claims **3 and 18**, *Dunn* teaches a request (send order) to establish a connection from originating station 25, as well as terminating toll switch 2 (switch) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (receive flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network (types of signaling channels) based on the analysis, and then generates

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appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches the sending (outputting) of the appropriate call signaling over the network as spoken of on column 4, lines 12-18.

Dunn also teaches the IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (receive flag) indicating the IP address (specified constant) of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50, as well as the call origination containing dialed digits (character string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn does not teach “wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch”.

However, *Park* teaches an apparatus for a switching system where internal flags (specified constants) used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim 4, *Dunn* further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet

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containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claim **5**, *Dunn* further teaches the IP communication shown in Figure 1.

Regarding claim **6**, *Dunn* further teaches processor 5 (microprocessor) of the switch 1 of Figure 1.

Regarding claim **7**, *Dunn* further teaches the IP communication shown in Figure 1.

Regarding claim **8**, *Dunn* further teaches processor 5 (microprocessor) of the switch 1 of Figure 1.

Regarding claim **9**, *Dunn* teaches the originating switch 1 (circuit switch) of Figure 1.

Dunn also teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn also teaches terminating toll switch 2 that receives an initial address message (IAM) 40 indicating the IP address of the originating switch 1 as spoken of on column 3, lines 39-45.

Dunn also teaches terminating toll switch 2 that in response to receipt (processing) of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Dunn also teaches the signaling messages 40, 45, 50, 55 transmitted via CCS7 network 5 (interface) as well as Internet 10 (interface) as shown in Figure 1.

Dunn does not teach "a receiver for adding a receive flag for internal use only".

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim **10**, *Dunn* further teaches the call origination containing dialed digits (character string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Regarding claim **11**, *Dunn* further teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (receive flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Regarding claim **12**, *Dunn* further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claim **13**, *Dunn* further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claim **14**, *Dunn* further teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Regarding claim **15**, *Dunn* teaches the originating switch 1 (circuit switch) of Figure 1.

Dunn also teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network (different types) as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn also teaches the choice of routing the call either over the Internet or over the toll network based on factors such as the present state of the networks, customer input, or dialed information (criteria) as spoken of on column 3, lines 10-21.

Dunn does not teach "a receiver for adding a receive flag for internal use only".

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim **16**, *Dunn* further teaches the signaling messages 40, 45, 50, 55 transmitted via CCS7 network 5 (interface) as well as Internet 10 (interface) as shown in Figure 1.

Regarding claim **17**, *Dunn* teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the sending of the appropriate call signaling over the network as spoken of on column 4, lines 12-18.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn does not teach “wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch”.

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common

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memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim **19**, *Dunn* teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn also teaches terminating toll switch 2 that receives an initial address message (IAM) 40 indicating the IP address of the originating switch 1 as spoken of on column 3, lines 39-45.

Dunn also teaches terminating toll switch 2 that in response to receipt (processing) of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Dunn does not teach "wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch".

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and

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transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim **20**, *Dunn* further teaches the signaling messages 40, 45, 50, 55 transmitted via CCS7 network 5 (interface) as well as Internet 10 (interface) as shown in Figure 1.

Regarding claim **21**, *Dunn* further teaches the routing of the call over the Internet or toll network based on the present state (predetermined criteria) of the two networks as spoken of on column 3, lines 10-13.

Regarding claim **22**, *Dunn* further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claim **23**, *Dunn* does not teach “wherein the switch only internally uses the receive flag of the received signaling message”.

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and

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transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim **25**, *Dunn* further teaches terminating toll switch 2 that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (instruction to process) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Response to Arguments

11. Applicant's arguments filed 5/9/08 have been fully considered but they are not persuasive.

Regarding the drawing objection to Figure 1, Applicant submits that a person of ordinary skill in the art would understand from the various elements in Figure 1 and the accompanying disclosure that the coupler 1 is part of the telephone exchange.

However, it is held that it is unclear what "part" of the telephone exchange that the coupler 1 comprises. From the labeling in Figure 1, it is unclear what the coupler 1 comprises (interpreter 14, interfaces 2 and 5, or a subset of these elements). In Figure 1, it appears as if the coupler 1 and the PABX are one and the same. Further, in the current claim language, a "circuit switch" is claimed that comprises "a coupler", "an interpreter", and "a receiver". This would imply that the coupler and the interpreter are two separate entities. Further clarification is requested.

Regarding the specification objection and the rejection of claims **17-21** under 35 U.S.C. 112 1st paragraph, while Applicant points out examples in the specification where

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various transmission protocols are used, and where signaling channels are accessed to produce a signaling configuration by an interpreter module 14 that is capable of running a program, none of these examples clearly define the claimed "computer readable medium storing instructions". While Applicant argues that the disclosure of accessing a signaling channel and producing a signaling configuration implies "instructions" for this process, and that these instructions must be stored on some form of a computer readable medium, and that "computer readable medium" is a term well-known in the art, it is held that there is no factual basis in the specification for "instructions" or a "computer readable medium" for storing these instructions provided in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Typically, when a "computer-readable medium" is claimed, there is a clear definition in the specification of what the "computer-readable medium" comprises (e.g. cache, RAM, ROM, other magnetic/optical recording media) so that the Office can effectively interpret the metes and bounds of the claim. Since the original specification does not provide this support, it is held that claims 17-21 fail to meet the written description requirement of 35 U.S.C. 112 1st paragraph as provided above.

Regarding the rejection of claims **17-21** under 35 U.S.C. 101, while Applicant argues that signals are not tangible, the addition of the term "tangible" constitutes new matter as there is no support in the originally filed specification for "a tangible computer readable medium". Thus, the addition of this term has not been given consideration.

Regarding claim 1, Applicant argues that *Dunn* does not teach “selecting a type of signaling channel from the signaling channels accessible to the coupler” as well as that “the signaling configuration produced depends on the selected type of signaling channel”.

However, as provided in the previous Office Action, *Dunn* teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

As Applicant noted, the signaling channel utilized is associated with the CCS7 network. In the teachings of *Dunn*, the CCS7 signaling channel is the type of channel selected as it is the signaling channel accessible to originating toll access switch 1. Further, the IAM signaling used is native (dependent) to the CCS7 channel being used.

It is held that *Dunn* teaches the above limitations in question.

Applicant further argues that *Dunn* does not teach “an interpreter producing a signaling configuration upon receiving an order to send a signaling message ... wherein the order is a predetermined constant character string. Applicant further argues that the dialed digits of a call in *Dunn* are neither predetermined nor constant. Applicant further argues that the dialed digits are dynamic and different depending on the number being called.

However, it is held that the dialed digits intended for a particular terminating station would constitute a "predetermined constant character string" as typically these dialed digits are assigned to particular terminating stations.

Using this interpretation, it is held that *Dunn* teaches the above limitations in question.

Applicant further argues that *Dunn* does not teach "a circuit switch comprising ... a receiver for adding a receive flag to a received signaling message".

While *Dunn* does teach terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50, it was admitted that *Dunn* does not teach "a receiver for adding a receive flag to a received signaling message" where "the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch".

However, *Park* was cited to teach this deficiency. As provided in the previous Office Action, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

It is held that *Dunn* in view of *Park* teaches the above limitation in question.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections

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are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. MOORE, JR., whose telephone number is (571)272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached at (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2619
8/16/08

/Michael J. Moore, Jr./
Examiner, Art Unit 2619